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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,278	11/08/2000	Robert Aigner	GR 98 P 1686	9981

7590            08/20/2002  
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EXAMINER
BUDD, MARK OSBORNE

ART UNIT	PAPER NUMBER
2834	

DATE MAILED: 08/20/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.	708 778	Applicant(s)	Aigner
Examiner	M. Bud	Group Art Unit	7834

--The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address--

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE

3

MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication .
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

**Status**

- Responsive to communication(s) filed on 6-26-02
- This action is FINAL.
- Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

**Disposition of Claims**

- Claim(s) 1-7 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- Claim(s) 1-7 is/are allowed.
- Claim(s) \_\_\_\_\_ is/are rejected.
- Claim(s) \_\_\_\_\_ is/are objected to.
- Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.
- The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- The specification is objected to by the Examiner.
- The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119 (a)-(d)**

- Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - All  Some\*  None of the CERTIFIED copies of the priority documents have been received.
  - received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

**Attachment(s)**

- Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- Interview Summary, PTO-413
- Notice of Reference(s) Cited, PTO-892
- Notice of Informal Patent Application, PTO-152
- Notice of Draftsperson's Patent Drawing Review, PTO-948
- Other \_\_\_\_\_

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Claims 1-7 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are Vague and indefinite in that it is unclear what actual structure is defined by the term "etching structures". It is noted that the term is used in the original disclosure, but no explanation or description is given.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claim 1 (as understood) rejected under 35 U.S.C. 102(a) as being clearly anticipated by Bottom or Zimnicki.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-7 (as understood) rejected under 35 U.S.C. 103(a) as being unpatentable over Bottom or Zimnicki in view of Von Dash, Fujita or Arvanitis teach the piezo resonator with a layer reduced by etching to tune the resonant frequency. They do not teach removal of material to form "holes" and relate to single devices. Each of Von Dash, Fujita and Arvanitis teach tuning

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can be done by removal of "spots" rather than an entire layer; to apply this known method to Bottom or Ziminicki to achieve towing e.g. coarse vs fine with etching would have been obvious to one of ordinary skill in the art. Providing duplicate parts has long been held to be within the skill expected of the routineer. Thus to provide multiple resonators would have been obvious to one of ordinary skill in the art.

M BUDD/pj

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08/14/02

  
MARK O. BUDD  
PRIMARY EXAMINER  
ART UNIT 212